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Advances in management research: a bibliometric overview of the Review of Managerial Science

Alicia Mas-Tur¹ · Sascha Kraus² · Mario Brandtner³ · Ralf Ewert⁴ · Wolfgang Kürsten³

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Abstract

The Review of Managerial Science (RMS) is a leading international journal that publishes major advances related to business administration and management. The journal was launched in April 2007 and publishes eight issues per year (from 2021 onwards). The scope of RMS encompasses, but is not limited to, the functional areas of operations (such as production, operations management, and marketing), management (such as human resources management, strategic management, and organizational theory), information systems and their interrelations with capital markets (such as accounting, auditing, finance, and taxation), as well as questions of business strategy, entrepreneurship, innovation, and corporate governance. This study offers a bibliometric overview of the publication and citation structure of RMS from its inception in 2007 until 2020 in terms of topics, authors, institutions, and countries, thereby offering a comprehensive overview of the history of the journal so far. All the data for the study are from the Web of Science Core Collection database. To complement this analysis, VOSviewer software provides graphical analysis. The analysis is based on several bibliometric techniques such as co-citation analysis and bibliographic coupling.

Keywords Bibliometrics · Co-citation · Web of science · VOSviewer

JEL Classification M1 · M10 · M19 · M20

✉ Sascha Kraus
sascha.kraus@zfke.de

¹ University of Valencia, Valencia, Spain

² Durham University, Durham, UK

³ Friedrich-Schiller-University of Jena, Jena, Germany

⁴ Karl-Franzens-University Graz, Graz, Austria

1 Introduction

The *Review of Managerial Science* (RMS) is an international journal that provides a forum for innovative research from all scientific areas of business administration and management. The scope of RMS encompasses, but is not limited to, the functional areas of operations (such as production, operations management, and marketing), management (such as human resources management, strategic management, and organizational theory), information systems and their interrelations with capital markets (such as accounting, auditing, finance, and taxation), as well as questions of business strategy, entrepreneurship, innovation, and corporate governance. RMS encourages the submission of papers combining ideas and/or approaches from different areas in an innovative way. The journal also welcomes review papers presenting the “state-of-the-art” of a research area and highlighting new directions for further research, a category that has been increasingly neglected in many other journals in recent years. The scientific standards of RMS are guaranteed by a rigorous (at least) double-blind peer review process with ad hoc referees and the journal’s international Editorial Board.

RMS first appeared in 2007, with the founding Co-Editors-in-Chief *Ralf Ewert* (University of Graz, Austria) and *Wolfgang Kürsten* (University of Jena, Germany), who still lead the journal. Since 2019, the two Editors-in-Chief are supported by a group of Associate Editors which has continuously been extended to accommodate the ongoing constant growth. From August 2020 onwards, this group consists of seven Associates: *Ricarda B. Bouncken* (University of Bayreuth, Germany; primary area: business strategy & innovation management), *Laura Cabeza-García* (University of León, Spain; primary area: corporate governance & corporate social responsibility), *Reinhold Decker* (Bielefeld University, Germany; primary area: marketing), *Fabian Homberg* (LUISS University, Rome, Italy; primary area: Human Resource Management), *Sascha Kraus* (Durham University, UK; primary area: entrepreneurship, SMEs, & family business), *Marc-Steffen Rapp* (University of Marburg, Germany; primary area: corporate governance, accounting, & finance), and *Kirsten Thommes* (University of Paderborn, Germany; primary area: Human Resource Management).

RMS started by publishing three issues per year and has increased this number over time to eight issues per year from 2021 onwards. The yearly page budget has correspondingly increased from approximately 250 pages in the founding years to around 1100 pages in recent years. The number of submissions strongly increased from approximately 40 during the founding years to more than 540 in 2019. At the same time, the acceptance rate decreased substantially to below 10% in 2018 and 2019 (see Table 1).

RMS is indexed and abstracted in major databases, including the Social Science Citation Index, Journal Citation Reports/Social Sciences Edition, SCOPUS, and EBSCO Discovery Service. In 2011, the journal’s first Journal Citation Reports (JCR) *Impact Factor* (IF) was announced. Since then, RMS has constantly increased its IF to its current IF of 3.00 in 2019. In Elsevier’s SCOPUS database, RMS is currently rated #25 out of 221 journals in the category “General Business, Management and Accounting” based on its 2019 *CiteScore* rank of 4.4. Additionally, RMS is rated “B” (on a scale from A to D) in the German *VHB Jourqual* (JQ3) journal ranking, and it has been listed in the British *Academic Journal Guide* (ABS) and the French CNRS ratings since their latest editions.

Table 1 An overview of RMS from 2007 to 2019

Year	Submissions	Page budget	Accepted papers	Acceptance rate (%)	Total cites	JCR impact factor
2007	36	270	16	44.44		
2008	37	219	14	37.84		
2009	38	248	15	39.47		
2010	46	258	19	41.30		
2011	47	291	13	27.66	13	0.105
2012	127	405	20	15.75	27	0.273
2013	214	512	29	13.55	31	0.345
2014	246	604	31	12.60	77	0.857
2015	258	777	31	12.02	111	0.814
2016	243	829	43	17.70	194	1.226
2017	272	991	39	14.34	292	1.483
2018	372	1080	35	9.41	429	2.393
2019	547	1176	46	8.41	685	3.0

The purpose of this overview study is to examine the main factors that have influenced RMS so far, mainly focusing on the authors, institutions, and countries publishing in the journal, as well as the leading topics that have been published up to now. This in-depth analysis establishes a general overview of the journal's publication structure.

In order to conduct this kind of analysis, several *bibliometric* techniques are applied. Bibliometrics is a library and information science research field where quantitative methods are used to study bibliographic material (Broadus 1987; Pritchard 1969). Using the Web of Science Core Collection (WoS CC) database, bibliometric analyses enable qualitative study of bibliographic material over the 13-year existence of the journal (2007–2019).

A bibliometric study of a journal is a popular approach for identifying the leading trends of a journal in terms of topics, highly cited papers, authors, institutions, and countries. Many journals have already published bibliometric analyses of their publication and citation structure, with notable examples including *Accounting Review* (Heck and Bremser 1986), *Journal of Financial Economics* (Schwert 1993), *Technovation* (García-Merino et al. 2006; Thongpapanl 2012), *Journal of Business Research* (Merigó et al. 2015), and *Journal of Knowledge Management* (Gaviria-Marín et al. 2018).

To thoroughly analyze bibliographic characteristics, mapping techniques are employed as well (Cobo et al. 2011; Small 1999). This article presents analysis of co-occurrences, co-citations, and bibliographic coupling based on the journal's 10-year presence in the Web of Science (WoS) database. The results are visualized using VOSviewer software (Van Eck and Waltman 2010).

2 Method

Bibliometrics can be defined as the research field in which the quantitative aspects of bibliographic material are studied (Broadus 1987). *Bibliometrics* was used as a key concept for the first time by Alan Pritchard in 1969 to replace the ambiguous concept of *statistical bibliography* (Pritchard 1969). Another term to refer to bibliometrics is *scientometrics*, which was coined by Nalimov and Mulchenko (1969) to define the study of all aspects of the literature of science and technology (Nalimov and Mulchenko 1969). Finally, Nacke (1979) proposed the term *informetrics* as a substitute for bibliometrics. Nowadays, bibliometrics, scientometrics, and informetrics are similar key concepts to define the discipline aimed at the quantitative study of bibliographic data (Sengupta 1992; Hood and Wilson 2001).

Bibliometrics is a library and information science research field where bibliographic material is studied using quantitative methods (Broadus 1987; Pritchard 1969). It is very useful for developing a comprehensive overview of the leading trends in a research field, journal, or country (Hood and Wilson 2001). It also enables identification of the most relevant authors on a given topic. A scientometric review provides a holistic approach because it involves a wide coverage of academic research (in this case, 285 publications) and provides objective analysis of a journal or a research field. This extensive review, which is based on a large number of published works, gives a more complete understanding of a journal or research field and can determine the qualitative and quantitative changes that

occur. Likewise, it enables the creation of maps by generating groups of the main research topics. Essentially, scientometric maps give a holistic view of a particular domain and highlight trends and gaps in research (Suriñach Caralt et al. 2002).

Bibliometric studies are available in a wide range of fields including economics (Coupe 2003), management (Podsakoff et al. 2008), innovation (Fagerberg et al. 2012), entrepreneurship (Landström et al. 2012; Ferreira et al. 2019), family business (Xi et al. 2015), and operations research (Merigó and Yang 2017). In comparison with traditional literature reviews (e.g., Kraus et al. 2020), which are prone to subjective interpretation by researchers, scientometric reviews constitute a methodological innovation (Serrano Bedia et al. 2013). This innovation stems from their use of algorithms, data on production, dispersion, collaboration, and impact indexes (Moya and Prior 2008) to provide objectivity, consistency, and transparency (van Eck and Waltman 2014).

To perform a bibliometric analysis, it is important to define the bibliometric indicators that are used to analyze the data (Merigó et al. 2015). This study considers the number of publications and citations. The number of publications measures productivity, whereas the number of citations reflects popularity and influence. This study also considers the cites-per-paper ratio and the h-index (Hirsch 2005). The h-index indicates the maximum number (h) such that a given author (or journal) has published h papers that have each been cited at least h times. For the country analysis, the results are provided per million inhabitants in order to compare countries with different sizes (Table 7). For the university analysis, the general world ranking of the top universities with authors published in RMS is presented, according to the *Academic Ranking of World Universities* (ARWU) and the *Quacquarelli & Symonds* (QS) University Ranking (Table 6).

The study offers further graphical analysis of the bibliographic data using VOSviewer software (Van Eck and Waltman 2010, 2014). Using this software, two bibliometric techniques are presented: co-citation analysis (Small 1999) and bibliographic coupling (Kessler 1963). A co-citation occurs when two documents receive a citation from the same third document. Bibliographic coupling refers to situations where two studies cite the same third document. Co-citation analysis applies to authors, and bibliographic coupling applies to authors, institutions, and countries.

3 Results

In the period 2009 to 2019, RMS published 285 documents indexed in WoS. These 285 documents encompass 248 original papers, 28 review papers, 7 editorials, and 2 other items such as proceedings or corrections. In this bibliometric analysis, 267 documents are considered. Notably, for 2019, 16 articles with early access are excluded. These articles were published online between October and November 2019, but had not been assigned to a regular issue at the time of the study.

Table 2 and Fig. 1 present the annual number of citations of RMS publications, as well as the number of publications reaching a certain citation threshold (more than 100 citations, more than 50 citations, etc.). The number of publications has increased over time. Simultaneously, there was a strong increase in the number of the citations from 2010 (24) to 2011 (296). The last few years show a decline in the number of citations. This decline can be regarded as normal and is due to the lag until articles which

Table 2 Annual citation structure of the journal

Y	TP	TC	≥ 100	≥ 50	≥ 25	≥ 10	≥ 5	≥ 1
2009	10	91	0	0	0	4	6	9
2010	10	24	0	0	0	0	2	8
2011	15	296	1	1	1	5	8	14
2012	17	271	1	1	2	5	7	14
2013	19	123	0	0	1	3	9	17
2014	24	190	0	1	2	3	11	20
2015	30	288	1	1	1	8	15	29
2016	29	241	0	0	2	8	13	27
2017	32	154	0	0	0	5	15	26
2018	37	173	0	0	2	3	11	30
2019	44	74	0	0	0	1	3	28

TP total publications, TC total citations; ≥ 100 , ≥ 50 , ≥ 25 , ≥ 10 , ≥ 5 , ≥ 1 = number of papers with at least 100, 50, 25, 10, 5, and 1 citation (TC gives the number of citations received by January 2020 by the papers published in a specific year)

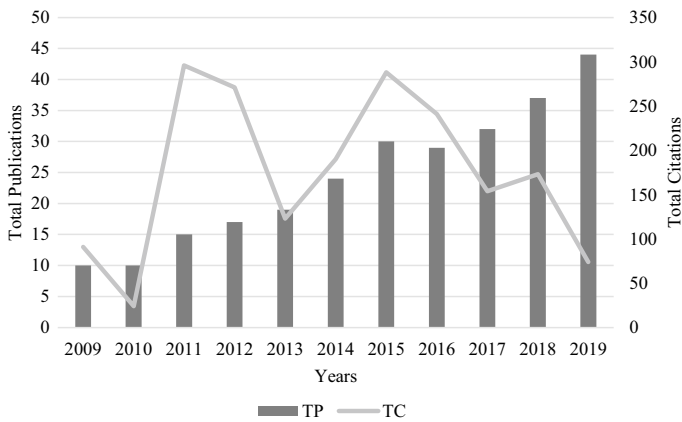


Fig. 1 Annual citation structure of the journal

cite those papers have also undergone the necessary review process before acceptance or publication. Papers published in the years 2013 and 2014 seem to have attracted a smaller audience as well.

Figure 2 shows the evolution of the TOP 5 most cited papers. On an individual basis, three papers have received more than 100 citations: the 2011 paper by Gamerschlag et al. entitled “Determinants of voluntary CSR disclosure: empirical evidence from Germany”, the Kraus et al. 2012 paper by Kraus et al. entitled “Entrepreneurial orientation and the business performance of SMEs: a quantitative study from the Netherlands”, and the 2015 paper by Bouncken et al. entitled “Coopetition: a systematic review, synthesis, and future research directions”. These papers are from three separate subject areas: CSR, entrepreneurship, and strategy.

Another relevant question is, *Who cites RMS?* The answer indicates the sources of RMS’s influence. During the years of 2009 to 2019, RMS received 1643 citations (February 2020). Table 3 presents the journals that have published more than 10 articles citing RMS.

As expected, RMS itself is the journal with the highest number of articles citing RMS publications because the research published in one journal tends to influence future research in the same journal, building an important foundation for the ongoing academic discourse on that topic. The journals *Sustainability* (90 documents), *Corporate Social Responsibility and Environmental Management* (37 documents), *Journal of Cleaner Production* (32 documents), and *Journal of Business Research* (30 documents) also cite RMS frequently.

In the next step, the relationship between RMS and other journals is analyzed using a co-citation mapping of journals cited by RMS publications (Fig. 3). Co-citations can be defined as two documents that receive a citation from the same third document (Cancino et al. 2017). A co-citation mapping is valuable for understanding the clusters of journals that are most closely linked to RMS because they are cited by papers published in RMS.

There are four main clusters. The first one is led by *Strategic Management Journal* and *Academy of Management Journal*, the second is led by *Journal of Finance* and *Journal of Financial Economics*, the third is led by *Journal of Business Research*, and the fourth is led by *Entrepreneurship Theory and Practice*. The conclusion is that there are four main areas of research cited by the manuscripts published in RMS: management, finance, business, and entrepreneurship.

Table 4 presents a list of the 25 most cited studies published in RMS according to the results found in WoS. In 1927, the first article that used the citation count to evaluate the importance of scientific research was published (Gross and Gross 1927). In the article, the author argues that success breeds success and that a document with many citations is more likely to be cited again than a document with few citations. Similarly, an author with many articles is more likely than a less productive author to publish a new article, and it is more common to refer to a frequently consulted journal than a journal with a small readership (Price 1976). As Joseph (2003) reports, citations can be viewed as the “currency of modern science” (Marsh and Merton 1986; Garfield 1999), and the analysis of citations has become increasingly important to journal editors, authors, and readers (Merigó et al. 2015). The list of the 25 most cited papers reveals three main topics: corporate social responsibility (CSR), business sustainability, and entrepreneurship and management.

In the fields of CSR and business sustainability, the topics of social entrepreneurship and green innovation are receiving considerable attention due to the current concerns related to environmental destruction (Abdullah et al. 2016). The most cited papers in RMS dealing with CSR and business sustainability focus on: (1) voluntary CSR disclosure as a key issue for company visibility, shareholder structure, and the relationship with stakeholders (Gamerschlag et al. 2011); (2) the relationship between CSR disclosure and market valuations, especially in reference to firms operating in environmentally sensitive industries (Reverte 2016); (3) board independence as the main way to enhance the adoption of social activities (Fernández-Gago et al. 2016); and (4) the growth in CSR practices and its effect on managerial discretion (Ferrero et al. 2012). There are two main points that attract scholars’ attention in this field of research: CSR disclosure and managerial implications of social activities.

Regarding entrepreneurship and management, Bouncken is a leading author whose research in RMS is focused on different fields of entrepreneurship. (1) Entrepreneurial orientation: Bouncken et al. (2016) focus on entrepreneurial orientation in inter-organizational alliances. From the dynamic capabilities point of view, the authors conclude that the ability to absorb partners’ knowledge is a key point to improve joint product innovation; (2) entrepreneurial performance: Bouncken and Reuschl (2018) focus on entrepreneurial performance and opportunism. Opportunism is seen as knowledge leakage, which reduces organizational learning processes by decreasing trust and community building; (3) entrepreneurial cooperation: As previously outlined, Bouncken et al. (2015) focus on cooperation. This is a novel research field, and the authors highlight the importance of developing more theoretical and empirical approaches. They focus on the implications for innovation, taking into consideration the relationship between cooperation and knowledge flow.

In the field of entrepreneurship, some of the most cited papers in RMS deal with family business, focusing on the following topics: (1) internationalization in family

firms (Mitter et al. 2014); (2) capital structure decisions of family firms (Ampenberger et al. 2013); and (3) corporate reputation and image (Sageder et al. 2018). In all cases, the studies focus on the influence of the family owners on the management of the company.

Table 5 lists the leading authors in terms of publications and impact. To be included in this list, the authors must have more than five citations and at least three publications. In academia, it has long been argued that more than one indicator must be evaluated to determine the overall contribution of an author or institution. Therefore, Table 5 provides different commonly used impact metrics: the total publications of the author, the h-index, the total number of citations, and, as a relative impact approach, the number of citations divided by the number of publications. The leading author in both number of publications and number of citations is Sascha Kraus, whose area of expertise is entrepreneurship, strategic management, and international management.

Finally, when analyzing the location of the authors' affiliation, two main clusters can be found: one consists of authors from German institutions, and the other of authors from Austrian institutions.

Figure 4a, b show the co-citations of authors in RMS. A co-citation (Small 1999; Marshakova-Shaikovich 2005) of authors occurs when the authors of two documents receive a citation from the same author in a third document. Thus, the co-citation establishes the number of documents in which they are cited together.

Figure 4a shows the relationship between authors in RMS, where four different clusters can be detected. This analysis shows that two of the most cited authors, Kraus and Bouncken, are especially related because of their common field of research: entrepreneurship and coopetition.

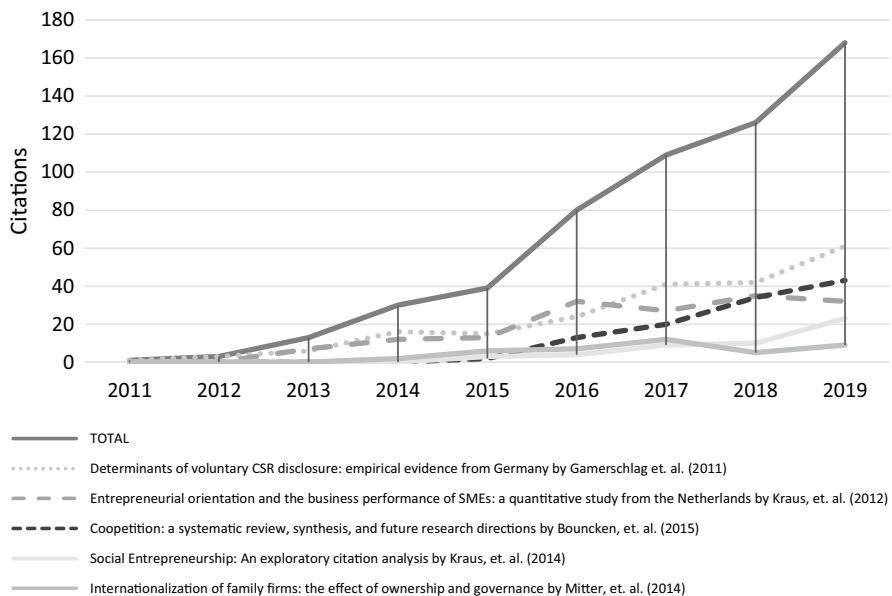


Fig. 2 Evolution of the citations of the most cited RMS papers

Table 3 Journals citing RMS

R	Source Titles	TP
1	Review of Managerial Science	108
2	Sustainability	90
3	Corporate Social Responsibility and Environmental Management	37
4	Journal of Cleaner Production	32
5	Journal of Business Research	30
6	Journal of Family Business Strategy	18
7	Management Decision	13
8	Technological Forecasting and Social Change	13
9	International Entrepreneurship and Management Journal	12
10	European Journal of International Management	11
11	Journal of Knowledge Management	11
12	Journal of Small Business Management	11
13	Business Strategy and the Environment	10
14	Economic Research-Ekonomska Istrazivanja	10
15	Industrial Marketing Management	10
16	International Business Review	10
17	International Journal of Technology Management	10
18	Journal of Business Ethics	10
19	Management Research Review	10
TP total publications		

Table 4 The 50 most cited documents

R	Title	Author/s	Year	TC	TC/Y	Area
1	Determinants of voluntary CSR disclosure: empirical evidence from Germany	Gamerschlag, R.; Moeller, K.; Verbeeten, F.	2011	212	21.2	CSR
2	Entrepreneurial orientation and the business performance of SMEs: a quantitative study from the Netherlands	Kraus, S.; Rigtering, J. P. C.; Hughes, M.; Hosman, V.	2012	159	17.67	Entrepreneurship
3	Coopetition: a systematic review, synthesis, and future research directions	Bouncken, R.; Gast, J.; Kraus, S.; Bogers, M.	2015	116	19.33	Coopetition
4	Social Entrepreneurship: An exploratory citation analysis	Kraus, S.; Filser, M.; O'Dwyer, M.; Shaw, E.	2014	50	7.14	Social entrepreneurship
5	Internationalization of family firms: the effect of ownership and governance	Mitter, C.; Duller, C.; Feldbauer-Durstmüller, B.; Kraus, S.	2014	44	6.29	Family firms
6	Capital structure decisions in family firms: empirical evidence from a bank-based economy	Ampenberger, M.; Schmid, T.; Achleitner, A.; Kaserer, C.	2013	39	4.88	Family firms

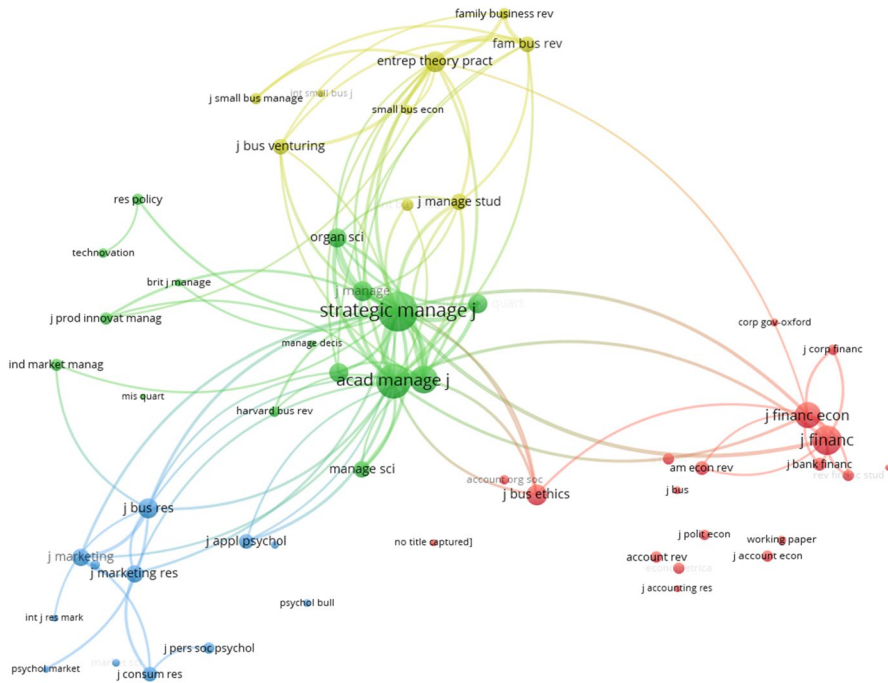


Fig. 3 Co-citation of journals in RMS (minimum citation threshold of 10 and 100 lines)

Figure 4b shows that Kraus, the leading author publishing in RMS according to Table 5, is the link between the clusters. As can be seen from Table 4, Kraus investigates topics related to entrepreneurship, coopetition, and family firms, so it is unsurprising that he has relationships with different clusters.

Figure 5 shows the co-occurrence of author keywords in RMS. Keyword co-occurrence is also called co-word analysis. This analysis links the most used keywords in the published manuscripts to describe the conceptual framework of a research field—in this case, the research focus of RMS (Callon et al. 1983; Courtial 1994; Ding et al. 2001).

Figure 5 displays the evolution of topics in RMS. Table 4 shows that there are two predominant topics addressed in RMS: CSR and family business. This figure also shows the most novel keywords (RMS keywords from 2018 appear in yellow). In the last year, two new key topics appeared: innovation and coopetition.

Table 6 presents the 14 most productive and influential institutions with more than five publications in RMS, ranked by total number of publications. For the university analysis, this study presents the general world ranking of the top universities in RMS, according to the ARWU and the QS University Ranking (Table 6).

Table 6 shows that the University of Regensburg (Germany) tops the ranking. Two members of the RMS Editorial Board belong to this university. One of them, Roland Helm, is the third-ranked author in terms of number of publications. Second and third, with the same number of publications, are Johannes Kepler University of Linz (Austria) and the University of Liechtenstein.

Table 4 (continued)

R	Title	Author/s	Year	TC	TC/Y	Area
7	Entrepreneurial orientation in vertical alliances: joint product innovation and learning from allies	Bouncken, R.; Plueschke, B.; Pesch, R.; Kraus, S.	2016	37	7.4	Entrepreneurship
8	Coworking-spaces: how a phenomenon of the sharing economy builds a novel trend for the workplace and for entrepreneurship	Bouncken, R.; Reuschl, A.	2018	31	10.33	Entrepreneurship
9	Barriers to green innovation initiatives among manufacturers: the Malaysian case	Abdullah, M.; Zailani, S.; Iranmanesh, M.; Jayaraman, K.	2016	31	6.2	Green innovation
10	Image and reputation of family firms: a systematic literature review of the state of research	Sageder, M.; Mitter, C.; Feldbauer-Durstmüller, B.	2018	29	9.67	Family firms
11	Determinants of director compensation in two-tier systems: evidence from German panel data	Andreas, J.; Rapp, M.; Wolff, M.	2012	29	3.22	Management

Table 4 (continued)

R	Title	Author/s	Year	TC	TC/Y	Area
12	Corporate social responsibility disclosure and market valuation: evidence from Spanish listed firms	Reverte, C.	2016	23	4.6	CSR
13	Do synergies exist in related acquisitions? A meta-analysis of acquisition studies	Homburg, F.; Rost, K.; Osterloh, M.	2009	23	1.92	Management
14	The effects of the interactive use of management control systems on process and organizational innovation	Lopez-Valeiras, E.; Beatriz Gonzalez-Sanchez, M.; Gomez-Conde, J.	2016	21	4.2	Management
15	Corporate social responsibility, board of directors, and firm performance: an analysis of their relationships	Fernandez-Gago, R.; Cabeza-Garcia, L.; Nieto, M.	2016	19	3.8	CSR
16	Product diversification strategy and financial performance: meta-analytic evidence on causality and construct multidimensionality	Bausch, A.; Pils, F.	2009	19	1.58	Management

Table 4 (continued)

R	Title	Author/s	Year	TC	TC/Y	Area
17	Optimal stimulation level theory, exploratory consumer behaviour and product adoption: an analysis of underlying structures across product categories	Helm, R.; Landschulze, S.	2009	19	1.58	Marketing
18	Agent-based modeling in managerial science: an illustrative survey and study	Wall, F.	2016	18	3.6	Management
19	The resource-based view of diversification success: conceptual issues, methodological flaws, and future directions	Hauschild, S.; Knipphausen-Aufsess, D.	2013	18	2.25	Management
20	Analysis and evaluation of moderator effects in regression models: state of art, alternatives and empirical example	Helm, R.; Mark, A.	2012	18	2	Methodological

Table 4 (continued)

R	Title	Author/s	Year	TC	TC/Y	Area
21	Is corporate social responsibility an entrenchment strategy? Evidence in stakeholder protection environments	Martinez-Ferrero, J.; Garcia-Sanchez, I.	2015	17	2.83	CSR
22	The interactive relationship of corporate culture and knowledge management: a review	Mueller, J.	2012	17	1.89	
23	Enabling disruptive innovations through the use of customer analysis methods	Reinhardt, R.; Gurtner, S.	2011	17	1.7	Innovation & marketing
24	Managerial challenges of Industry 4.0: an empirically backed research agenda for a nascent field	Schneider, R.	2018	16	5.33	Management
25	The impact of the board of directors characteristics on corporate performance and risk-taking before and during the global financial crisis	Ferrero-Ferrero, I.; Angeles Fernandez-Izquierdo, M.; Jesus Munoz-Torres, M.	2012	16	1.78	Corporate governance

TP total publications. *TC* total citations

Table 5 Leading authors publishing in RMS

R	Name	TP	h	TC	TC/TP	University	Country
1	Sascha Kraus	13	8	464	35.69	Durham U Business School	UK
2	Chieh-Peng Lin	8	1	5	0.63	National Chiao Tung U	Taiwan
3	Roland Helm	7	5	66	9.43	U Regensburg	Germany
4	Ricarda B. Bouncken	6	4	97	16.17	U of Bayreuth	Germany
5	Mohammad Iranmanesh	4	3	60	15	Edith Cowan U	Australia
6	Andreas Herrmann	4	3	12	3	U St Gallen	Switzerland
7	Chiu Chou-Kang	4	1	4	1	National Taichung U	Taiwan
8	Christine Mitter	3	3	81	27	Johannes Kepler U of Linz	Austria
9	Birgit Feldbauer-Durstmueller	3	2	73	24.33	Johannes Kepler U of Linz	Austria
10	Robin Pesch	3	2	52	17.33	U of Bayreuth	Germany
11	Friederike Wall	3	2	31	10.33	U of Klagenfurt	Austria
12	Isabel-Maria Garcia-Sanchez	3	3	28	9.33	U of Salamanca	Spain
13	Jennifer Martinez-Ferreiro	3	3	28	9.33	U of Salamanca	Spain
14	Subaiza Zailani	3	3	28	19.33	U Malaya	Malaysia
15	Matthias Fink	3	2	16	5.33	Johannes Kepler U of Linz	Austria
16	Sebastian Lobe	3	2	14	4.67	U Regensburg	Germany
17	Andrea Moro	3	2	13	4.33	U Udine	Italy

Table 5 (continued)

R	Name	TP	h	TC	TC/TP	University	Country
18	Dirk Schiereck	3	3	13	14.33	Technical U of Darmstadt	Germany
19	Hermann Frank	3	2	11	3.67	Vienna U of Economics & Business	Austria
20	Gregor Dorfleitner	3	1	9	3	U of Regensburg	Germany
21	Rita Laura D'Ecclesia	3	2	6	2	U di Roma Sapientia	Italy

These values refer to publications in RMS

TP total publications, TC total citations, h h-index

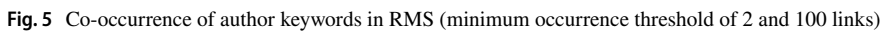
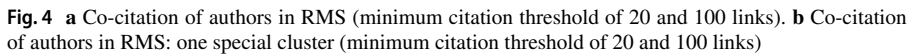
 Springer

Table 6 The most productive and influential institutions

R	Institution	Country	TP	H	TC	TC/TP	ARWU	QS
1	U of Regensburg	Germany	15	5	79	5.3	501–600	601–650
2	Johannes Kepler U of Linz	Austria	13	6	123	9.5	601–700	412
3	U Liechtenstein	Liechtenstein	13	8	462	35.5	/	/
4	U of Augsburg	Germany	10	4	38	3.8	801–900	/
5	National Chiao Tung U	Taiwan	8	1	5	0.6	501–600	227
6	U of Bayreuth	Germany	8	5	213	26.6	501–600	541–550
7	U of Graz	Austria	7	2	17	2.4	401–500	541–550
8	Vienna U of Economics Business	Austria	7	3	23	3.3	/	/
9	Darmstadt U of Technology	Germany	6	3	17	2.8	501–600	260
10	Technical U of Munich	Germany	6	4	93	15.5	57	55
11	U Malaya	Malaysia	6	4	66	11.0	301–400	70
12	U Hohenheim	Germany	6	2	12	2.0	701–800	651–700
13	U Klagenfurt	Austria	6	4	45	7.5	/	/
14	U of St Gallen	Switzerland	6	3	16	2.7	/	398

TP total publications, TC total citations, h h-index, ARWU academic ranking of World Universities, QS quacquarelli and symonds university ranking

Table 7 The most productive and influential countries publishing in RMS by year

R	Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TP	TC	TC/TP
1	Germany	7	7	9	9	16	14	11	9	11	9	14	116	910	7.8
2	Spain	0	0	0	1	1	3	5	8	8	11	6	43	303	7.0
3	Austria	2	1	6	3	1	3	11	2	2	3	5	39	221	5.7
4	Switzerland	2	2	1	1	1	1	2	0	0	1	3	14	57	4.1
5	Taiwan	0	0	0	0	0	1	2	1	2	1	7	14	18	1.3
6	Liechtenstein	0	0	0	2	0	2	2	1	1	3	2	13	462	35.5
7	United Kingdom	1	0	0	1	0	1	5	0	2	0	2	12	243	20.3
8	United States	0	0	1	0	1	2	1	1	2	3	1	12	34	2.8
9	Italy	1	0	0	3	0	2	1	0	0	3	2	12	47	3.9
10	Netherlands	0	0	1	2	0	2	3	0	1	1	0	10	491	49.1
11	Malaysia	0	0	0	0	0	0	1	1	3	2	1	8	71	8.9
12	China	0	0	0	0	0	1	1	2	1	1	1	7	23	3.3
13	Finland	0	1	0	1	0	1	0	0	0	3	0	6	70	11.7
14	Denmark	0	0	0	0	0	1	2	0	1	1	1	6	124	20.7
15	France	0	0	1	0	1	1	2	0	0	1	1	6	134	22.3
16	South Korea	0	0	0	0	0	1	1	1	0	0	3	6	31	5.2

TP total publications, TC total citations

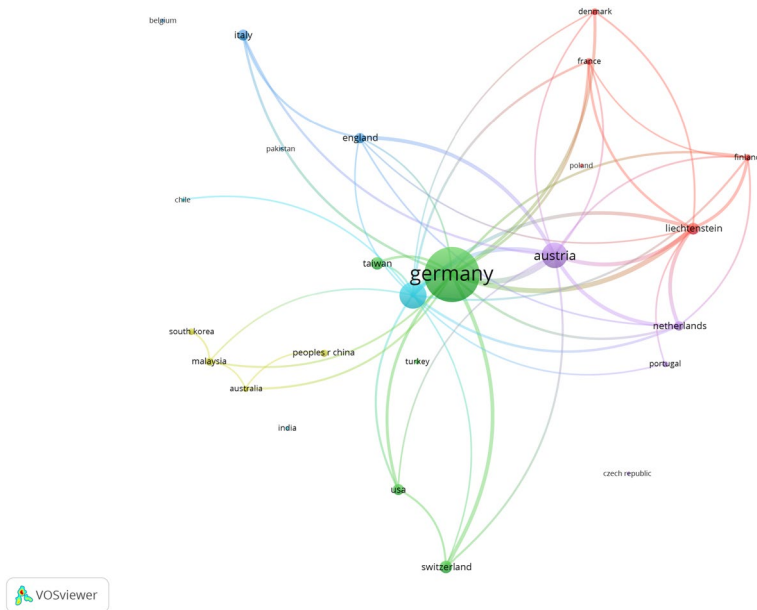


Fig. 6 Bibliographic coupling of countries publishing in RMS (minimum publication threshold of 2 documents and 50 links)

Table 7 represents the annual evolution of contributions by countries. The dominant country in RMS with the most contributions is Germany (91), followed by Spain (33) and Austria (25). For the country analysis, the results are presented per million inhabitants in order to compare countries of different sizes (Table 7).

Figure 6 shows the bibliographic coupling of countries publishing in RMS with a minimum publication threshold of two documents and 50 links. According to Kessler (1963), bibliographic coupling can be defined as the number of shared references by citing documents (that is, two documents that cite the same third document).

As Fig. 6 shows, there are four country clusters. The first cluster contains Germany, Switzerland, Taiwan, and the United States. The second is composed of Spain, Chile, the United States, and Portugal. The third cluster comprises Austria, the Netherlands, Germany, and England. The fourth cluster is made up of Liechtenstein, Finland, Poland, and France. Additionally, there is a fifth cluster. Despite being small, this cluster should be mentioned because it contains countries such as China, South Korea, Malaysia, and Australia, all of which are Asia–Pacific countries that share research with each other.

Germany has by far the most bibliographic couplings and links with all other countries. This is unsurprising since Germany is the most productive and influential country publishing in RMS over time (Table 7). Moreover, Germany also has the most productive and influential institution, with the University of Regensburg (Table 6), and another six German universities appear in Table 6 among the most productive institutions. In addition, Fig. 5 shows other major clusters such as Austria, Taiwan, Liechtenstein, and England. Austria is also present in this research because it is the third country in Table 7. Moreover, four Austrian institutions appear in Table 6, where the most

productive and influential institutions are shown, and six of the most influential authors belong to this country.

Furthermore, Spain (in blue) is closely related to Germany. Spain is also related to Chile, which is another Spanish-speaking country. As can be seen from Table 7, Spain is the second most productive and influential country. Finally, Fig. 6 shows a close relationship between Germany, Austria, and Liechtenstein. This pattern is unsurprising because this paper has already shown that the authors and institutions from these countries—which all share the same language—are closely linked.

4 Conclusions

This study offers an overview of the structure of publications that have appeared in RMS from the journal's launch in 2007 until the end of 2019. To carry out the study, bibliometric indicators from the WoS database are used. The analysis examines the number of citations of RMS by authors and other journals, as well as the most cited articles and the most productive and influential institutions and countries. In addition, the bibliometric study is complemented by VOSviewer analysis, which provides graphical analysis of the clusters of research topics, countries, and authors in the journal.

The results show a strong increase in publications and citations over time. It is worth highlighting the high impact of the articles published by the main authors, since they have managed to receive citations of all their articles published in RMS. The results also indicate that Germany is the leading country in the journal in terms of impact, followed by Spain, Austria, and Switzerland. In a similar vein, the most influential institution is the University of Regensburg in Germany, with a total of 15 publications, followed by other European universities. In addition, the VOSviewer analysis shows that Germany has the most bibliographic couplings and links with other countries.

Regarding the clusters obtained from the VOSviewer analysis of knowledge areas and topics, there are four main areas of research cited by the manuscripts published in RMS: management, finance, business, and entrepreneurship. Within these areas, there are two dominant topics in the journal's publications throughout its history: CSR and family business. However, innovation and coopetition have recently become increasingly cited topics.

Although this study offers a comprehensive analysis of the main RMS publications, it of course has some limitations. The study of the journal's publications refers to the period since the journal's inception. Accordingly, the earliest published articles have normally received more citations than the most recent ones, even if the latter might be more influential; their long-term impact might not yet have been seen. Furthermore, by their very nature, the analyses are descriptive as well as backward-oriented. They can serve very well for presenting the past but can only give limited information about upcoming future trends in terms of the topics which will become influential. What can be concluded already, however, is that the journal is continuing to rise. As a result of the high quality of its publications, RMS has been indexed in the WoS since 2011, just four years after its launch. This achievement shows the high degree of interest of authors and readers in the topics of the journal, as well as its academic impact. Also the JCR Impact Factor is constantly increasing. RMS currently holds a JCR Impact Factor of 3.0 (as of

2019), and it is ranked in the second quartile of the “Management” category. RMS has gained international appeal and is continuing to actively shape academic discourse in several areas of management science.

All in all, RMS continues to welcome contributions from all areas within the wider business and management continuum that, regardless of the chosen method (quantitative, qualitative, mixed methods, experimental, conceptual, as well as review articles or meta-analyses, but usually excluding single case studies, student samples or samples from one single geographical area—such as cities or regions—with limited representativeness or generalizability), have the potential to set new foundations for a prominent future academic discourse within the journal and beyond.

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